

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant: Sabina J. Houle et al.

Title: MULTI-LAYER POLYMER-SOLDER HYBRID THERMAL INTERFACE MATERIAL FOR INTEGRATED HEAT SPREADER AND METHOD OF MAKING SAME

Docket No.: 884.832US1

Filed: June 26, 2003

Examiner: Unknown

Serial No.: 10/607,738

Due Date: April 4, 2005

Group Art Unit: 1725

**MS Amendment**

Commissioner for Patents

P.O. Box 1450

Alexandria, VA 22313-1450

We are transmitting herewith the following attached items (as indicated with an "X"):

- A return postcard.
- Response to Restriction Requirement and Preliminary Amendment (7 Pages).
- An Information Disclosure Statement (2 pgs.), Form 1449 (1 pg.), and copies of 4 of the cited documents.

If not provided for in a separate paper filed herewith, Please consider this a PETITION FOR EXTENSION OF TIME for sufficient number of months to enter these papers and please charge any additional fees or credit overpayment to Deposit Account No. 19-0743.

SCHWEGMAN, LUNDBERG, WOESSNER & KLUTH, P.A.

Customer Number 21186

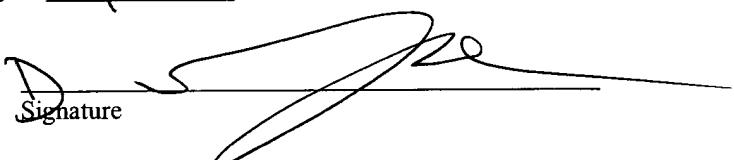
By: Ann M. McCrackin

Atty: Ann M. McCrackin

Reg. No. 42,858

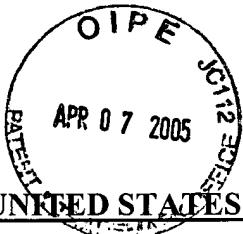
CERTIFICATE UNDER 37 CFR 1.8: The undersigned hereby certifies that this correspondence is being deposited with the United States Postal Service with sufficient postage as first class mail, in an envelope addressed to: MS Amendment, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450, on this 4 day of April 2005.

Dennis J. Vample  
Name

  
Signature

SCHWEGMAN, LUNDBERG, WOESSNER & KLUTH, P.A.  
(GENERAL)

S/N 10/607,738



PATENT

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

Applicant: Sabina J. Houle et al. Examiner: Kiley Stoner  
Serial No.: 10/607,738 Group Art Unit: 1725  
Filed: June 26, 2003 Docket: 884.832US1  
Title: MULTI-LAYER POLYMER-SOLDER HYBRID THERMAL INTERFACE  
MATERIAL FOR INTEGRATED HEAT SPREADER AND METHOD OF  
MAKING SAME  
Assignee: Intel Corporation Customer No. 21186

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**INFORMATION DISCLOSURE STATEMENT**

MS Amendment  
Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

In compliance with the duty imposed by 37 C.F.R. § 1.56, and in accordance with 37 C.F.R. §§ 1.97 *et. seq.*, the enclosed materials are brought to the attention of the Examiner for consideration in connection with the above-identified patent application. Applicants respectfully request that this Information Disclosure Statement be entered and the documents listed on the attached Form 1449 be considered by the Examiner and made of record. Pursuant to the provisions of MPEP 609, Applicants request that a copy of the 1449 form, initialed as being considered by the Examiner, be returned to the Applicants with the next official communication.

Pursuant to 37 C.F.R. §1.97(b), it is believed that no fee or statement is required with the Information Disclosure Statement. However, if an Office Action on the merits has been mailed, the Commissioner is hereby authorized to charge the required fees to Deposit Account No. 19-0743 in order to have this Information Disclosure Statement considered.

**INFORMATION DISCLOSURE STATEMENT**

Serial No :10/607,738

Filing Date: June 26, 2003

Title: MULTI-LAYER POLYMER-SOLDER HYBRID THERMAL INTERFACE MATERIAL FOR INTEGRATED HEAT SPREADER AND

METHOD OF MAKING SAME

Assignee: Intel Corporation

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Dkt: 884.832US1

The Examiner is invited to contact the Applicants' Representative at the below-listed telephone number if there are any questions regarding this communication.

Pursuant to 37 C.F.R. 1.98(a)(2), Applicant believes that copies of cited U.S. Patents and Published Applications are no longer required to be provided to the Office. Notification of this change was provided in the United States Patent and Trademark Office OG Notices dated October 12, 2004. Thus, Applicant has not included copies of any US Patents or Published Applications cited with this submission. Should the Office require copies to be provided, Applicant respectfully requests that notice of such requirement be directed to Applicant's below-signed representative. Applicant acknowledges the requirement to submit copies of foreign patent documents and non-patent literature in accordance with 37 C.F.R. 1.98(a)(2).

Respectfully submitted,

SABINA J. HOULE ET AL.

By their Representatives,

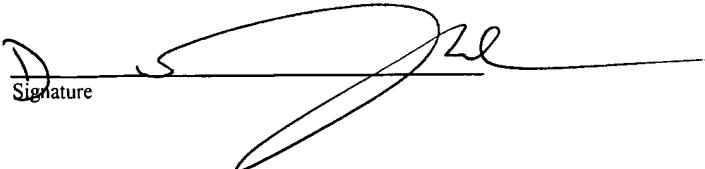
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Date April 4, 2005

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Ann M. McCrackin  
Reg. No. 42,858

**CERTIFICATE UNDER 37 CFR 1.8:** The undersigned hereby certifies that this correspondence is being deposited with the United States Postal Service with sufficient postage as first class mail, in an envelope addressed to: MS Amendment, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450, on this 4 day of April 2005.

Denise J. Kampf  
Name

  
Signature

APR 07 2005

PTO/SB/08A(10-01)  
Approved for use through 10/31/2002. OMB 651-0031  
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US Patent & Trademark Office: U.S. DEPARTMENT OF COMMERCE

Substitute for form 1449A/PTO

**INFORMATION DISCLOSURE  
STATEMENT BY APPLICANT**

(Use as many sheets as necessary)

SEARCHED \_\_\_\_\_ SERIALIZED \_\_\_\_\_ INDEXED \_\_\_\_\_ FILED \_\_\_\_\_ APR 07 2005  
APR 07 2005  
APR 07 2005

Complete if Known	
<b>Application Number</b>	10/607,738
<b>Filing Date</b>	June 26, 2003
<b>First Named Inventor</b>	Houle, Sabina
<b>Group Art Unit</b>	1725
<b>Examiner Name</b>	Kiley Stoner

Sheet 1 of 1

Attorney Docket No: 884.832US1

**US PATENT DOCUMENTS**

Examiner Initial *	USP Document Number	Publication Date	Name of Patentee or Applicant of cited Document	Filing Date If Appropriate
	US-2002/0135984 A1	09/26/2002	Greenwood, A. W., et al.	01/14/2002
	US-2004/0261980 A1	12/30/2004	Dani, A. A., et al.	06/30/2003
	US-4,782,893	11/08/1988	Thomas, D. L.	02/23/1988
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	US-5,981,085	11/09/1999	Ninomiya, J. , et al.	03/10/1997
	US-6,008,988	12/28/1999	Palmer, M. J.	02/25/1997
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	US-6,219,243	04/17/2001	Ma, Q. , et al.	12/14/1999
	US-6,343,647	02/05/2002	Kim, C. , et al.	01/11/2000
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	US-6,602,777	08/05/2003	Kao, C. , et al.	03/20/2002
	US-6,751,099	06/15/2004	Vrtis, J. K., et al.	12/20/2001

**FOREIGN PATENT DOCUMENTS**

Examiner Initials*	Foreign Document No	Publication Date	Name of Patentee or Applicant of cited Document	T <sup>2</sup>
	WO-02091395A1	11/14/2002	Nguyen, M.	
	WO-05006361A2	01/20/2005	Houle, S., et al.	

**OTHER DOCUMENTS -- NON PATENT LITERATURE DOCUMENTS**

Examiner Initials*	Cite No <sup>1</sup>	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T <sup>2</sup>
		CHANG, CHIN-AN , "Enhanced Cu-Teflon adhesion by presputtering treatment: Effect of surface morphology changes", <u>Applied Physics Letters</u> , 51(16), (October 19, 1987),1236-1238	
		PERRINS, L E., et al., "Mechanism for the adhesion of electroplated copper to polypropylene", <u>Plastics and Polymers</u> , 39(144), (December 1971),391-397	

**EXAMINER****DATE CONSIDERED**

Substitute Disclosure Statement Form (PTO-1449)

EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. 1 Applicant's unique citation designation number (optional) 2 Applicant is to place a check mark here if English language Translation is attached